Top 10 Statewide Technology Priorities

The following priorities were identified by state agencies and other stakeholders during DIR's state strategic planning effort for 2014–2018. The priorities are presented in the following order: the first three are of significant interest to state leadership as illustrated by recent legislative action, the next four are offered for the first time as of this strategic planning cycle, and the final three remain as priorities from the previous planning cycle.

These priorities represent critical needs that may be addressed by agencies in their Agency Strategic Plans, or highlighted in Legislative Appropriations Requests for the 2016–2017 biennium.

Security and Privacy

Develop governance, policies, and guidelines to secure the technology infrastructure, ensure the integrity of online services, and protect the private information collected from citizens and businesses.

The safety and security of state information resources is a fundamental responsibility of every agency. Citizens trust the state with their personal information, credit card numbers, and other confidential data with the expectation of protection and privacy. Agencies must take a proactive and comprehensive approach to building a secure infrastructure. As the state's citizen-facing services continue to move to an online service model, it is critical that the highest priority be given to maintaining the security and privacy of citizen data.

Cloud

Consider, and adopt as appropriate, cloud-based software, platform, and infrastructure services to drive cost-effective and efficient operations.

Cloud computing has proven to be a cost-effective and efficient alternative to procuring and maintaining an agency's internal information technology infrastructure, platform, and applications. With an increasing number of government-specific private cloud offerings, advances in cloud security, and expected economic benefits, there are potential cost savings and operational advantages in moving to the cloud. The cloud model has been successfully applied in the public and private sectors and is mature enough to be adopted for Texas government.

Legacy Modernization

Identify existing mission-critical legacy applications and prioritize their replacement or modernization.

A legacy application is a computer program based on older and less efficient technology. Modernization of legacy applications—through replacement or extending compatibility with new systems—can be expensive and complex. However, failure to modernize aging legacy applications may be more costly as the technical expertise able to support it becomes scarce. The maintenance of legacy applications remains a challenge due to lack of funding, staff resources, and decreasing vendor support.

Virtualization

Virtualize existing server and desktop environments to reduce operational costs and improve service delivery.

Virtualization is the creation of a logical (rather than physical) instance of an operating system, server, storage device, or network resource. Traditionally, one would procure a server or desktop and install the operating system and applications directly onto the hardware. With virtualization, the operating system and applications are separated from the underlying physical device.

Business Continuity

Ensure critical government information technology services continue in the event of a disaster or a disruption of normal operations.

State government relies on technology to deliver services and it must be prepared to ensure critical operations continue in the face of a disaster or the

disruption of services. A business continuity plan identifies critical functions and the personnel, facilities, and other resources required to deliver essential functions. Business continuity planning prepares government to recover technology assets to resume mission-critical functions.

Enterprise Planning and Collaboration

Enhance statewide efficiencies through improved planning and collaboration among and within agencies.

Texas state government should seek opportunities to enable cooperation among state agencies to work together on technology solutions. While the decentralized structure of IT operations in Texas gives state agencies relative autonomy over decisions relating to information resources, there are still opportunities for enterprise collaboration and planning. Collaboration can enable state agencies to better manage expenditures and operate more effectively. Whether breaking down internal program silos or working with other state agencies to meet the needs of multiple enterprises, collaboration affects the degree to which the state improves its return on IT investments.

IT Workforce

Develop and implement strategies to recruit, retain, and manage a fully trained and qualified IT workforce to meet current and future mission objectives.

Skilled IT professionals are needed to plan, develop, and manage IT solutions. IT staff play a vital role in mission-critical decisions and effective service delivery. IT professionals have a direct impact on an agency's operations and overall success. A strategic focus on building a skilled and efficient technology workforce is essential. State agencies must plan in order to address the effects of the aging state workforce, the competition for skilled technology workers, the need to keep pace with innovative technologies, and the generational differences in work methods and expectations.

Data Management

Implement sound data management principles to support good business practices, meet regulatory requirements, and reduce costs.

State agencies continue to produce and accumulate large quantities of data. The rapid proliferation of data and the legal and regulatory requirements to retain, manage, and protect it has created significant challenges for business and IT managers. Government must improve its data management practices from creation to disposition to provide opportunities to enhance the value and usefulness of agency information.

Mobility

Support the needs of increasingly mobile citizens and workforce populations.

Mobility continues to drive the direction of IT service delivery and customer interaction as citizens expect more self-service applications. Mobility offers opportunities for Texas government to expand its services to citizens and gain greater productivity within its workforce. It is important for state agencies to integrate the demand for mobile solutions into their overall IT strategy. Quality mobile solutions offer opportunities to create value and innovation, and many mobile solutions can be easily deployed at little or no cost.

Network

Provide innovative network services to allow agencies to improve efficiency and successfully deliver citizen services.

In Texas, network services have been transformed by the business needs of government, which requires greater bandwidth over Internet protocol platforms, greater reliability, and security balanced with flexibility. As in the private sector, state government seeks an array of services from multiple vendors—with flexible but enforceable service level agreements—to meet its broad range of business requirements. The state's enterprise approach remains a vital component of the cost-effective pricing of communications.